

2014-2018
FIVE-YEAR CAPITAL IMPROVEMENTS PROGRAM
SANITARY PROJECTS TOTALS

12/18/2013

	2014	2015	2016	2017	2018	Category Totals
Design/Engineering	\$158,000	\$277,800	\$792,800	\$173,000	\$178,400	\$1,580,000
Right-of-Way	\$0	\$0	\$400,000	\$0	\$0	\$400,000
Utilities	\$0	\$0	\$465,000	\$0	\$0	\$465,000
Construction	\$527,000	\$500,700	\$610,800	\$5,831,300	\$547,400	\$8,017,200
Contract Admin./Inspection	\$60,900	\$57,600	\$70,700	\$697,100	\$62,900	\$949,200
Yearly Totals	\$745,900	\$836,100	\$2,339,300	\$6,701,400	\$788,700	

Source of Funding Sanitary Sewer Funds 267/268

Grand Total = \$11,411,400

Portion of Cost to be funded by Development

	2014	2015	2016	2017	2018	Category Totals
Design/Engineering	\$0	\$115,000	\$625,000	\$0	\$0	\$740,000
Right-of-Way	\$0	\$0	\$400,000	\$0	\$0	\$400,000
Utilities	\$0	\$0	\$465,000	\$0	\$0	\$465,000
Construction	\$0	\$0	\$0	\$5,300,000	\$0	\$5,300,000
Contract Admin./Inspection	\$0	\$0	\$0	\$636,000	\$0	\$636,000
Yearly Totals	\$0	\$115,000	\$1,490,000	\$5,936,000	\$0	

Source of Funding Sanitary Sewer Funds 267 & 268

Grand Total = \$7,541,000

Percentage

66%

Sanitary projects required due OEPA Findings & Orders or NPDES II

	2014	2015	2016	2017	2018	Category Totals
Design/Engineering	\$158,000	\$277,800	\$617,800	\$173,000	\$178,400	\$1,405,000
Right-of-Way	\$0	\$0	\$375,000	\$0	\$0	\$375,000
Utilities	\$0	\$0	\$450,000	\$0	\$0	\$450,000
Construction	\$486,000	\$500,700	\$610,800	\$4,531,300	\$547,400	\$6,676,200
Contract Admin./Inspection	\$12,500	\$12,900	\$24,700	\$13,700	\$14,100	\$77,900
Yearly Totals	\$656,500	\$791,400	\$2,078,300	\$4,718,000	\$739,900	

Source of Funding Sanitary Sewer Funds 267 & 268

Grand Total = \$8,984,100

2014-2018
FIVE-YEAR CAPITAL IMPROVEMENTS PROGRAM
SANITARY PROJECTS TOTALS

12/18/2013

Project	Total Cost	Fiscal Year 2014	Fiscal Year 2015	Fiscal Year 2016	Fiscal Year 2017	Fiscal Year 2018	Fund Name	Fund Number
S-20 Comprehensive Maintenance and Operations Plan Including Annual Inflow & Infiltration Abatement Program								
Design/Engineering	\$438,000	\$82,400	\$84,900	\$87,500	\$90,200	\$93,000		
Right-of-Way								
Utilities								
Priority Construction								
I Contract Admin./Inspection								
TOTAL	\$438,000	\$82,400	\$84,900	\$87,500	\$90,200	\$93,000	Sewer Revenue	304
S-28(D) Upper Scioto West Sub Trunk Sanitary Sewer								
Design/Engineering	\$565,000		\$115,000	\$450,000				
Right-of-Way	\$375,000			\$375,000				
Utilities	\$450,000			\$450,000				
Priority Construction	\$4,000,000				\$4,000,000			
I Contract Admin./Inspection	\$480,000				\$480,000			
TOTAL	\$5,870,000		\$115,000	\$1,275,000	\$4,480,000		Sewer Revenue	268

2014-2018
FIVE-YEAR CAPITAL IMPROVEMENTS PROGRAM
SANITARY PROJECTS TOTALS

12/18/2013

Project	Total Cost	Fiscal Year 2014	Fiscal Year 2015	Fiscal Year 2016	Fiscal Year 2017	Fiscal Year 2018	Fund Name	Fund Number
S-31 Lift Station Rehabilitation and Replacement Program								
Design/Engineering	\$282,200	\$53,100	\$54,700	\$56,400	\$58,100	\$59,900		
Right-of-Way								
Utilities								
Priority Construction	\$1,917,100	\$361,000	\$371,900	\$383,100	\$394,600	\$406,500		
I Contract Admin./Inspection	\$230,300	\$43,400	\$44,700	\$46,000	\$47,400	\$48,800		
TOTAL	\$2,429,600	\$457,500	\$471,300	\$485,500	\$500,100	\$515,200	Sewer Revenue	268
S-32(D) Big Darby Lift Station and Force Main								
Design/Engineering	\$175,000			\$175,000				
Land and Easements	\$25,000			\$25,000				
Utilities	\$15,000			\$15,000				
Priority Construction	\$1,300,000				\$1,300,000			
I Contract Admin./Inspection	\$156,000				\$156,000			
TOTAL	\$1,671,000			\$215,000	\$1,456,000		Sewer Revenue	268
S-33 Annual Sanitary Sewer Cleaning & CCTV & Rehabilitation Program								
Design/Engineering	\$119,800	\$22,500	\$23,200	\$23,900	\$24,700	\$25,500		
Right-of-Way								
Utilities								
Priority Construction	\$664,100	\$125,000	\$128,800	\$132,700	\$136,700	\$140,900		
I Contract Admin./Inspection	\$66,500	\$12,500	\$12,900	\$13,300	\$13,700	\$14,100		
TOTAL	\$850,400	\$160,000	\$164,900	\$169,900	\$175,100	\$180,500	Sewer Revenue	268/304

2014-2018
FIVE-YEAR CAPITAL IMPROVEMENTS PROGRAM
SANITARY PROJECTS TOTALS

12/18/2013

Project	Total Cost	Fiscal Year 2014	Fiscal Year 2015	Fiscal Year 2016	Fiscal Year 2017	Fiscal Year 2018	Fund Name	Fund Number
S-37 Norwich Street Sanitary Sewer Rehabilitation								
Design/Engineering								
Right-of-Way								
Utilities								
Priority Construction	\$95,000			\$95,000				
I Contract Admin./Inspection	\$11,400			\$11,400				
TOTAL	\$106,400			\$106,400			Sewer Revenue	268
S-39 MUNICIPAL PARK SPORTS FACILITY SANITARY SEWER								
Design/Engineering								
Right-of-Way								
Utilities								
Construction	\$41,000	\$41,000						
Contract Admin./Inspection	\$5,000	\$5,000						
TOTAL	\$46,000	\$46,000					Sewer Revenue	268

FIVE-YEAR CAPITAL IMPROVEMENTS PROGRAM SANITARY PROJECTS TOTALS

12/18/2013

C.I.P. No. S-20

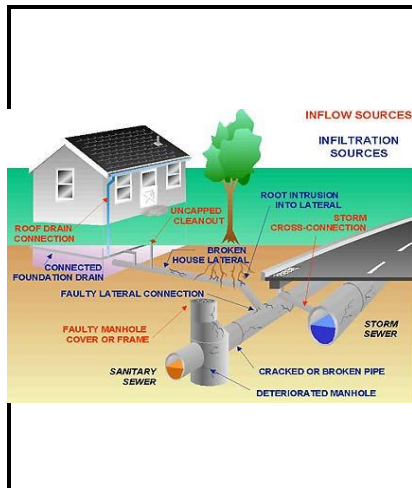
Comprehensive Maintenance and Operations Plan Including Annual Inflow & Infiltration Abatement Program

This project is an annual program necessary to identify sources of storm water/clean water infiltration and inflow (I & I) into the sanitary sewer system in areas of the City developed prior to 1980. Increased amounts of clean water introduced into the sanitary sewers during and after a rain event reduce the capacity of the sewers for sewage, increases the likelihood for basement backups to occur, and increases the volume of wastewater to be treated. Columbus Wet Management Program will drive the need for this as well as Capacity Management and Operation Maintenance (CMOM). Since 1995, this project has attempted to mitigate some of the problems in sections of the City developed prior to 1980. These efforts have consisted of cleaning and televising sanitary sewers, sealing all manholes and deficient pipe joints, repairing cracks in pipes, treating & cutting roots, and eliminating illegal connections to the sanitary sewer system. However, persistent sanitary sewer backups into basements are still occurring. In 2003, a consultant was hired to study the sanitary sewers in Old Hilliard, and the Conklin, Roman Hill, and Williamsburg subdivisions. This study consisted of reviewing past incidents of basement backups, an on-site review of the sanitary sewer system in these subdivisions, and the monitoring of sewage flow in the sewer system in the spring of 2004 and summer 2005. Results of the sewer flow monitoring detected increased flows in the system during and after rainfall events. Based upon the nature and characteristic of these flow increases, the consultant has a good understanding of the source of the I & I into the sanitary sewer system. However, additional testing and studies are necessary to definitively identify these sources.

The proposed program established for identifying and mitigating some of these storm water I & I sources consists of preliminary studies (such as those undertaken in 2003 as described above), follow-up studies, and capital improvement projects to mitigate the clean water sources that are identified. It is the City's intent to undertake follow-up studies and begin some capital improvement mitigation projects in 2009 for the above subdivisions studied in 2004-05, while also proceeding with preliminary studies in some additional older subdivisions. Each successive year of the program would follow this plan, with follow-up studies and capital improvement projects being undertaken in subdivisions that have had preliminary studies conducted previously, as well as proceeding with preliminary studies on additional subdivisions. 2009 included \$27,000 for sanitary drain fix for Hilliard City Pools. 2012 includes design funds to develop plans for necessary sanitary sewer projects.

New Professional Services agreement started 2013 - multi year contract year 1 budgeted at \$80,000 with a 3 percent increase thereafter.
2014-18 3 percent increase per year.

Location Map (No Scale)



Figures below are for 5 year program uses current year \$

Design/Engineering	\$438,000
Right-of-Way	\$0
Utilities	\$0
Construction	\$0
Contract Admin./Inspection	\$0
Total	\$438,000

Companion C.I.P.'s

S-31; S-33

Authorizing Legislation

09-21

Funding Source

Department	408
Fund Name	Sewer Revenue
Fund Number	304

Project Origin

Priority Level: I

Fiscal Year =		2014			
2014	2015	2016	2017	2018	
\$82,400	\$84,900	\$87,500	\$90,200	\$93,000	
\$0	\$0	\$0	\$0	\$0	

**FIVE-YEAR CAPITAL IMPROVEMENTS PROGRAM
SANITARY PROJECTS TOTALS**

12/18/2013

C.I.P. No. S-28(D)

Upper Scioto West Sub Trunk Sanitary Sewer

In 2005, this project constructed a portion of a new sanitary sewer trunk line from its existing terminus within the Scioto West/Hayden Run tributary area at the northeast corner of Hayden Run Road and Edwards Farms Drive west and north to the intersection of Britton Parkway and Riggins Ct. This project was bid, awarded, and constructed in 2005 for approximately \$2.4 million.

A separate project, known as S-28A, constructed a sub trunk of this sewer from the Britton Parkway/Riggins Court intersection south along Britton Parkway to existing Hayden Run Road. S-28A was bid and constructed in 2005 as part of the larger CIP T-65A roadway project. Private development has now extended this trunk sewer to the west right-of-way of Wilcox Road.

The Upper Scioto West Sanitary Sub trunk will serve areas west of its existing terminus. The extension of this sanitary trunk line will likely be done in phases and portions may be built by private developers or by the City. A regional lift station will be needed west of the Railroad tracks. For purposes of this project the design is anticipated to begin as shown below with construction of the lift station to follow.

Location Map
(No Scale)



Figures below are for 5 year program
uses current year \$

Design/Engineering	\$565,000
Right-of-Way	\$375,000
Utilities	\$450,000
Construction	\$4,000,000
Contract Admin./Inspection	\$480,000
Total	\$5,870,000

Companion C.I.P.'s

Authorizing Legislation

Funding Source

Department	408
Fund Name	Sewer Revenue
Fund Number	268

Project Origin

Priority Level: I

Fiscal Year =		2014		
2014	2015	2016	2017	2018
	\$115,000	\$450,000		
		\$375,000		
		\$450,000		
			\$4,000,000	
			\$480,000	

**FIVE-YEAR CAPITAL IMPROVEMENTS PROGRAM
SANITARY PROJECTS TOTALS**

12/18/2013

C.I.P. No. S-31

Lift Station Rehabilitation and Replacement Program

The City of Hilliard has 15 lift/pump stations operating to allow for passage of both storm and sanitary sewer water where a gravity fall sewer is not possible or practical. These lift stations are typically very large, with deep wet wells that periodically require maintenance. The typical life of such stations does not exceed 25 years, and may be even less. Very large pumps, floats, and other mechanical items require maintenance or replacement on even more aggressive schedules. As the stations age, the City anticipates more maintenance and replacement dollars will be necessary to keep the systems in operation.

The Parkway Lane lift station near Buckeye Nissan was reconstructed as part of this program in 2009 at a cost of \$340,000. Design of Heritage Lakes lift station will be completed in 2013.

This sanitary sewer CIP program provides for one lift station rehabilitation per year.

2014

Heritage Lakes lift station is estimated to cost \$361,000 with construction in 2014.

Budgeted at \$457,500 per year with a 3 percent annual increase

Location Map
(No Scale)



Figures below are for 5 year program
uses current year \$

Design/Engineering	\$282,200
Right-of-Way	\$0
Utilities	\$0
Construction	\$1,917,100
Contract Admin./Inspection	\$230,300
Total	\$2,429,600

Companion C.I.P.'s

S-20

Authorizing Legislation

Funding Source

Department	408
Fund Name	Sewer Revenue
Fund Number	268

Project Origin

Priority Level: I

Fiscal Year =		2014			
2014	2015	2016	2017	2018	
\$53,100	\$54,700	\$56,400	\$58,100	\$59,900	
\$361,000	\$371,900	\$383,100	\$394,600	\$406,500	
\$43,400	\$44,700	\$46,000	\$47,400	\$48,800	

**FIVE-YEAR CAPITAL IMPROVEMENTS PROGRAM
SANITARY PROJECTS TOTALS**

12/18/2013

C.I.P. No. S-32(D)

Big Darby Lift Station and Force Main

The Big Darby area of Brown Township is the current limits of the Hilliard Contract Service Area. In order to develop this area two regional lift stations will be required. This program provides for the design and construction of these necessary improvements. These can be paid for with developer contributions, an add on capacity charge, and/or sewer capacity fee increases.

The current plan is now for 3 lift stations with the first built as part of Heritage Preserve Development in 2013 the second not likely before 2016. The third not needed until after 2017. The need for these pump stations will be driven by development.

Location Map
(No Scale)



Figures below are for 5 year program
uses current year \$

Design/Engineering	\$175,000
Land and Easements	\$25,000
Utilities	\$15,000
Construction	\$1,300,000
Contract Admin./Inspection	\$156,000
Total	\$1,671,000

Companion C.I.P.'s

Authorizing Legislation

Funding Source

Department	408
Fund Name	Sewer Revenue
Fund Number	268

Project Origin

Priority Level: I

Fiscal Year = 2014				
2014	2015	2016	2017	2018
		\$175,000		
		\$25,000		
		\$15,000		
			\$1,300,000	
			\$156,000	

**FIVE-YEAR CAPITAL IMPROVEMENTS PROGRAM
SANITARY PROJECTS TOTALS**

12/18/2013

C.I.P. No. S-33

Annual Sanitary Sewer Cleaning & CCTV & Rehabilitation Program

This program is an annual maintenance program in which a portion of the City's sanitary sewer system will be cleaned and closed-circuit televised. The program has been set up to enable the City's entire sanitary sewer system to be cleaned and televised over a 7-year period. The program will be an on-going annual program, with one 7-year cycle being followed by another. The cost for each annual program takes into account that a portion of the sewers may need heavy cleaning (cleaning in excess of standard, normal cleaning methods). The annual program cost also allows for a fixed number of pipe repairs to be made at specific locations in the sewer as necessary.

With this program the City will identify sanitary sewers that need work beyond minor spot repairs. The program will then design the necessary sanitary sewer lining projects or other rehabilitation of the system as necessary.

2008-09 had \$200,000 for the first year of this program.

2010 & 2011 \$155,000; 2012 & 2013 \$160,000

2014-18 baseline estimated total cost is \$160,000 with a 3% inflation cost for future years.

Location Map
(No Scale)



Figures below are for 5 year program
uses current year \$

Design/Engineering	\$119,800
Right-of-Way	\$0
Utilities	\$0
Construction	\$664,100
Contract Admin./Inspection	\$66,500
Total	\$850,400

Companion C.I.P.'s

S-20

Authorizing Legislation

Ord. 09-21

Funding Source

Department	408
Fund Name	Sewer Revenue
Fund Number	268/304

Project Origin

Priority Level: I

Fiscal Year = 2014				
2014	2015	2016	2017	2018
\$22,500	\$23,200	\$23,900	\$24,700	\$25,500
\$125,000	\$128,800	\$132,700	\$136,700	\$140,900
\$12,500	\$12,900	\$13,300	\$13,700	\$14,100

FIVE-YEAR CAPITAL IMPROVEMENTS PROGRAM SANITARY PROJECTS TOTALS

12/18/2013

C.I.P. No. S-37

Norwich Street Sanitary Sewer Rehabilitation

This project includes lining of approximately 1,600' of an existing, aging 10-inch vitrified clay sanitary sewer trunk along the east side of Norwich Street. As a result of the Norwich Street Improvements Project, this sanitary sewer trunk line is now located under the curb and gutter on the east side of Norwich Street. A failure of this sewer trunk line in the future would require the removal of the curb and gutter and possibly some street lights on the east side of Norwich Street, resulting in a costly repair. The purpose of this lining project is to rehabilitate the sewer and add structural strength to the pipe in order to avoid repairs to the line in the future. An additional benefit of this project is the abatement of any inflow and infiltration of clean water that is currently entering this sewer through the existing pipe joints.

2016:

\$95,000 construction, and \$11,400 for contract administration and construction inspection.

Location Map
(No Scale)



Figures below are for 5 year program
uses current year \$

Design/Engineering	\$0
Right-of-Way	\$0
Utilities	\$0
Construction	\$95,000
Contract Admin./Inspection	\$11,400
Total	\$106,400

Companion C.I.P.'s

S-20

Authorizing Legislation

Funding Source

Department	408
Fund Name	Sewer Revenue
Fund Number	268

Project Origin

Priority Level: I

Fiscal Year = 2014				
2014	2015	2016	2017	2018
		\$95,000		
		\$11,400		

**FIVE-YEAR CAPITAL IMPROVEMENTS PROGRAM
SANITARY PROJECTS TOTALS**

12/18/2013

C.I.P. No. S-39

MUNICIPAL PARK SPORTS FACILITY SANITARY SEWER

This project includes approximately 250' of new sanitary sewer trunk to provide sanitary sewer to the new sports dome facility

2014:

\$41,000 construction, and \$5,000 for contract administration and construction inspection.

Project was not constructed in 2013 so funds will need to be reappropriated as part of the 2014 CIB.

Location Map
(No Scale)



Figures below are for 5 year program
uses current year \$

Design/Engineering	\$0
Right-of-Way	\$0
Utilities	\$0
Construction	\$41,000
Contract Admin./Inspection	\$5,000
Total	\$46,000

Companion C.I.P.'s

S-20

Authorizing Legislation

Funding Source

Department	408
Fund Name	Sewer Revenue
Fund Number	268

Project Origin

Priority Level: I

Fiscal Year = 2014					
	2014	2015	2016	2017	2018
Design/Engineering					
Right-of-Way					
Utilities					
Construction	\$41,000				
Contract Admin	\$5,000				